#### § 157.158

## § 157.158 COW operations: Changed characteristics.

The COW system may be operated with characteristics that do not meet those recorded under §157.150(b) only if:

- (a) The tank vessel passes the inspections under §157.140 using the changed characteristics;
- (b) The changed characteristics used to pass the inspections under §157.140 are recorded in the *Crude Oil Washing Operations and Equipment Manual* approved under §157.112; and
- (c) The Coast Guard issues to the tank vessel an amending letter stating that the tank vessel complies with this subpart with these characteristics.

## §157.160 Tanks: Ballasting and crude oil washing.

- (a) The owner, operator, and master of a tank vessel under §157.10(e) shall ensure that:
- (1) Ballast water is carried in a cargo tank only as allowed under §157.35;
- (2) For sludge control, at least 25 percent of the cargo tanks are crude oil washed before each ballast voyage and that each cargo tank is crude oil washed at least once every fourth time crude oil is discharged from the tank, but no tank need be crude oil washed more than once during each 120 day period:
- (3) Ballast water in a cargo tank that is crude oil washed but not water rinsed during or after the most recent discharge of crude oil from that tank is discharged in accordance with §157.37(a); and
- (4) Cargo tanks are not crude oil washed during a ballast voyage.
- (b) The owner, operator, and master of a tank vessel having a COW system under \$157.10a(a)(2) or \$157.10c(b)(2) shall ensure that—
- (1) Ballast water is carried only in a cargo tank that is crude oil washed during or after the most recent discharge of crude oil from that tank;
- (2) Before each ballast voyage a sufficient number of cargo tanks have been crude oil washed during or after the most recent discharge of crude oil from those tanks to allow ballast water to be carried in cargo tanks:
- (i) With a total capacity to meet the draft and trim requirements in §157.10a(d); and

- (ii) For the vessel's trading pattern and expected weather conditions;
- (3) For sludge control, at least 25 percent of the cargo tanks not used for carrying ballast water under paragraph (b)(2)(i) of this section are crude oil washed before each ballast voyage, and that each cargo tank is crude oil washed at least once every fourth time crude oil is discharged from the tank, but no tank need be crude oil washed more than once during each 120 day period:
- (4) Cargo tanks are not crude oil washed during a ballast voyage; and
- (5) Ballast water in a cargo tank that is crude oil washed but not water rinsed during or after the most recent discharge of crude oil from that tank is discharged in accordance with §157.37(a).

[CGD 77-058b, 45 FR 43709, June 30, 1980, as amended by CGD 82-28, 50 FR 11628, Mar. 22, 1985]

# §157.162 Crude oil washing during a voyage.

The master of a tank vessel having a COW system under §157.10(e), §157.10a(a)(2), or §157.10c(b)(2) shall ensure that each cargo tank that is crude oil washed during a voyage other than a ballast voyage—

(a) Remains empty so that the tank may be inspected upon arrival at the next discharge port; and

(b) If it is to be used as a ballast tank when leaving the discharge port, is ballasted before the vessel departs from that discharge port so that the tank may be inspected under §157.140(a)(2).

[CGD 77-058b, 45 FR 43709, June 30, 1980, as amended by CGD 82-28, 50 FR 11628, Mar. 22, 1985]

#### §157.164 Use of inert gas system.

- (a) The master of a tank vessel having a COW system under \$157.10(e), \$157.10a(a)(2), or \$157.10c(b)(2) shall ensure the following:
- (1) Before each cargo tank is crude oil washed, the oxygen content in the tank is measured at each of the following locations in the tank:
  - (i) One meter from the deck.
- (ii) In the center of the ullage space.
- (2) Before each cargo tank with partial bulkheads is crude oil washed, each